

REMARKS

Claims 28-38, 40 and 42-46 are pending in the application.

Claims 28-38, 40 and 42-46 are rejected.

The specification is objected to by the Examiner.

The drawings filed on 22 January 2002 are objected to by the Examiner.

Claims 28-38, 40 and 42 are rejected under 35 U.S.C. 112.

Claims 29-31 and 43-46 are rejected under 35 U.S.C. 112.

Claims 28-34, 36-38, 40 and 42-46 are rejected under 35 U.S.C. 103(a).

Claim 35 is rejected under 35 U.S.C. 103(a).

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, distinction between the elements “bond pads (110)” and “circuit solder ball pads (11),” and the elements “printed circuit pattern (106)” and “wire bond (112),” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Specification

The disclosure is objected to because of the following informalities: Numerals 106, 108 and 110, which appear in figure 5, are not recited in the disclosure.

Claim Objections

Claims 44 and 46 are objected to because of the following informalities: In claim 44, the phrase “the semiconductor chip” should read “a semiconductor chip.” In claim 46, the phrase “first and second circuit patterns” should read “first and second conductive circuit patterns.”

Claim Rejections – 35 U.S.C. § 112

Claims 28-38, 40 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 29-31 and 43-46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Claim Rejections – 35 U.S.C. § 103

Claims 28-34, 36-38, 40 and 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (6,707,149).

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Sota, et al. (6,064,111).

This is responsive to the Office Action mailed October 11, 2006, and is also further to the telephone interview between the Examiner and the undersigned attorney for applicant on November 17, 2006.

In the interview, applicant agreed to amend the drawings and specification as set forth above, including cancellation of claims 43-46, which the examiner indicated were directed to an invention different from the invention defined in the claim 28 series. The examiner also indicated that the amendments to the claims, coupled with the specification and drawing revisions, would overcome the objections and Section 112 rejections. Agreement was not reached on the rejections based on the prior art. But the examiner indicated that the amendments, especially defining the term “wire bond” in the specification, would go further to clarifying the scope of the invention and distinguishing it from the prior art.

Claim 28 as amended above is reproduced below with exemplary structure in the specification identified with a numeral following the corresponding claim limitation. Applicant has added new numbers 113, 209 to the drawing and specification (in the above amendment) to aid in understanding of the claim as amended. These numbers are included in the below claim.

28. A semiconductor package comprising:
a substrate (100) having a plurality of first printed circuit bond fingers (104) formed on the surface of the substrate;
a semiconductor chip (102) having a plurality of bond pads (110) formed thereon;

a plurality of first printed circuit solder ball pads (110) formed on the surface of the substrate;

a printed circuit pattern (106) formed on the surface of the substrate and electrically connecting each of a group of first printed circuit bond fingers (104) and a corresponding first solder ball pad (108);

a wire bond (112) electrically connecting each of the group of first printed circuit bond fingers (104) and a corresponding bond pad (110) thereby electrically connecting each of the corresponding bond pads to a first solder ball pad;

a second printed circuit bond finger (208) formed on the surface of the substrate;

a second printed circuit solder ball pad (206) formed on the surface of the substrate;

a second printed circuit pattern (209) formed on the surface of the substrate and electrically connecting the second printed circuit bond finger (208) and the second printed circuit solder ball pad (206);

a third printed circuit bond finger (204) formed on the surface of the substrate;

a first wire bond (113) having one end affixed to the third bond finger (204) and the other end affixed to one of the bond pads (202); and

a second wire bond (114) having one end affixed to the second bond finger (208) and the other end affixed to the third bond finger (204) thereby electrically connecting said one bond pad (202) to said second printed circuit solder ball pad 206).

For the same reasons set forth in the remarks accompanying the last amendment, applicant requests reconsideration and reexamination of the claims as amended above. The amendments to the written specification, drawing, and claims clarify the scope of the invention and further distinguish it from the prior art.

For the foregoing reasons, reconsideration and allowance of the pending claims as amended is requested. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

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